

NEC

– Please Read – Important Cordless Telephone Installation Information

DS1000/2000 900 MHz Cordless Telephone Installation Tips

- The cordless telephone base unit plugs into a *digital* station port.
- For best results, the base unit should be placed in line-of-site with its handset.
- Cordless telephone range and reception can vary from site to site. Some of the things that may adversely affect range and reception are:
 - Placing the base against or close to a wall (particularly if the wall has metal studs).
 - Positioning the base close to a device that emits Electromagnetic Interference (EMI), such as a TV, radio, computer, fluorescent light, fax machine, or printer.
 - Installing the base close to other 900 Mhz devices, such as Symbol or Telex hand-held inventory devices.
 - Installing the base above a ceiling that uses foil-backed insulation.
 - Installing the base behind a door which can be closed, tinted windows, or one-way glass which will separate the base from the handset.
- Always raise the base unit antenna to its full vertical position.
- When installing more than one cordless telephone in the same site:
 - Be sure the base units are at least 15 feet apart.
 - After installation, change each telephone's channel by pressing **CH** on the handset. This will minimize interference between your cordless telephones. There are 30 available channels.
- The handset must charge 5-8 hours in its charger prior to initial use.
- The Nickel Metal Hydride Rechargeable Battery Pack is recyclable. If you replace a battery pack, always dispose of the old pack along with your other recyclable materials.

DS1000/2000

Cordless Telephone User Guide

(03.14.00)

This manual has been developed by NEC America, Inc. It is intended for the use of its customers and service personnel, and should be read in its entirety before attempting to install or program the system. Any comments or suggestions for improving this manual would be appreciated. Forward your remarks to:

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Table of Contents

Chapter 1: Installation	1
Introduction	1
DS1000/2000 900 Mhz Cordless Telephone	1
Overview	1
Programming	1
1802-Ring Down Destination	1
The Basics	2
Basic Operation	2
Using the Basic Features	2
Answering Calls	2
Placing Calls	2
Hanging Up	2
Changing Channels	2
Standby Mode	2
Traveling Out Of Range	2
Using the Base Cordless and Desk Buttons	2
Low Battery	2
Using Your Handset	3
Installation	4
Installing the Base	4
Connecting the Base	4
Wall-Mounting the Base	7
Mounting the Base on the Wall	7
Mounting the Base to a Wall Plate	8
Installing the Battery	9
Installing the Battery in your Handset	9
Charging the Handset	10
Installing the Charger and Charging the Handset	10
Cleaning the Battery Charger Contacts	10
Wall-Mounting the Charger	11
Using the Belt Clip	12
Installing the Belt Clip	12
Using the Earloop Style	
Headset with your Cordless Telephone	13
Installing Headset P/N 750638 (M145 Earloop Style)	13
Earloop Installation	13
Ear Cushion Installation	14
Connecting the Headset and Using the Controls	15
Using the Headband Style Headset with your Cordless Telephone	16
Installing Headset P/N 750637 (M175 Headband Style)	16
Optional Earloop Installation	16
Connecting the Headset and using the Controls	18
Specifications and Parts	19
Specifications	19
Parts and Accessories	20

Table of Contents

Chapter 2: Features	21
Feature Operation	21
Barge In	21
Call Coverage Keys	21
Call Forwarding	22
Call Forwarding Off Premise	22
Call Waiting / Camp On	22
Callback	23
Caller ID	23
Central Office Calls, Answering	23
Central Office Calls, Placing	23
Conference	24
Directed Call Pickup	24
Distinctive Ringing	25
Do Not Disturb Override	25
Extension Hunting	25
Forced Trunk Disconnect	26
Group Call Pickup	26
Group Ring	26
Hold	26
Hotline	27
Intercom	27
Last Number Redial	27
Meet Me Conference	28
Message Waiting	28
Microphone Mute	28
Monitor / Silent Monitor	28
Night Service / Night Ring	29
Off-Hook Signaling	29
Paging	29
Park	29
Prime Line Preference	30
Privacy Release Groups	30
Programmable Function Keys	30
Removing Lines and Extensions	32
Reverse Voice Over	33
Ringing Line Preference	33
Save Number Dialed	33
Speed Dial	34
Split	34
Tandem Trunking	35
Transfer	35
Trunk (Line) Queuing and Callback	36
Voice Mail	36
Voice Over	37
Volume Control	37
Walking Class of Service	38
Feature Summary	39
Cordless Telephone Feature Summary	39

Chapter 1: Installation **1**

DS1000/2000 900 Mhz Cordless Telephone

Overview

The DS1000/2000 900 Mhz Cordless Telephone (P/N 80683) is a 900 Mhz digital narrow band FM cordless telephone that provides mobility, flexibility and convenience for those who spend much of the workday away from their desk. Fully integrated with the DS1000/2000 system, DS1000/2000 900 Mhz Cordless Telephone offers many standard features such as Call Forwarding, Call Coverage, Hotline, and Voice Mail. Complemented by 4 fully programmable function keys (with LEDs), the DS1000/2000 900 Mhz Cordless Telephone achieves a whole new level of convenience and mobility. An easy-to-read 16-character by 2-line LCD display (with four status icons), volume controls, a rechargeable Nickel Metal Hydride Battery Pack, and a handy belt clip round out the elegant and affordable DS1000/2000 900 Mhz Cordless Telephone.

The DS1000/2000 900 Mhz Cordless Telephone auto-IDs in **1801-Extension Circuit Type** with circuit type 50. No additional programming is required for basic feature operation.



Programming

1802-Ring Down Destination

For the cordless telephone extension number, use this option to designate the extension associated with the base unit *Desk* button. By default, there is no entry for this option.

The Basics

Basic Operation

Using the Basic Features

Answering Calls

- *Outside calls:* Ring with 2 short rings followed by a long ring.
- *Intercom calls:* Ring with 1 long ring.
- *To answer a call:* Press **TALK** or the flashing line key.
 - *If your handset is in the charger, lifting the handset answers the incoming call.*

Placing Calls

- *Intercom calls:* Press **TALK** + Dial co-worker's extension or ***8** for Voice Mail.
- *Outside calls:* Press **TALK** + Dial trunk access code + Dial outside number, or Press line key + Dial outside number

Hanging Up

- Press **TALK** or place the handset in the charger.

Changing Channels

If the installation site has more than one DS1000/2000 900 Mhz Cordless Telephone, set up each telephone to operate on its own channel.

- While on a call, press **CH**.
 - *The **TALK** icon flashes briefly while the handset changes channels. There are 30 channels max.*
 - *If you select a channel that is already in use, you see **SYSTEM BUSY**.*

Standby Mode

- When the handset is out of the charger, it will go into Standby Mode after about 5 minutes. Standby mode blanks the display to conserve power.
- Placing or answering a call automatically cancels Standby Mode.

Traveling Out Of Range

- If you try to place a call while out of range (beyond the range of your handset):
 - **ACQUIRING LINK** flashes in your display.
 - *You hear five quick beeps.*
 - **NO SERVICE** flashes in your display.
- If you travel out of range while on a call:
 - *You hear five quick beeps.*
 - *Your handset goes into standby mode.*
 - *The call disconnects.*

Using the Base **Cordless** and **Desk** Buttons

- While on a call at your cordless handset: Press **Desk** to transfer the call to your desk extension.
- While on a call at your desk extension: Press **Cordless** to transfer the call to your cordless handset.
- While idle at your cordless handset: Press **Desk** to call your desk extension on the Intercom.
- While idle at your desk extension: Press **Cordless** to beep (locate) for cordless handset.

Low Battery

If the **LOW** icon displays:

- If on a call, press **TALK** to hang up as soon as possible so your call is not interrupted.
- Recharge or replace the battery before placing or answering another call.

Using Your Handset

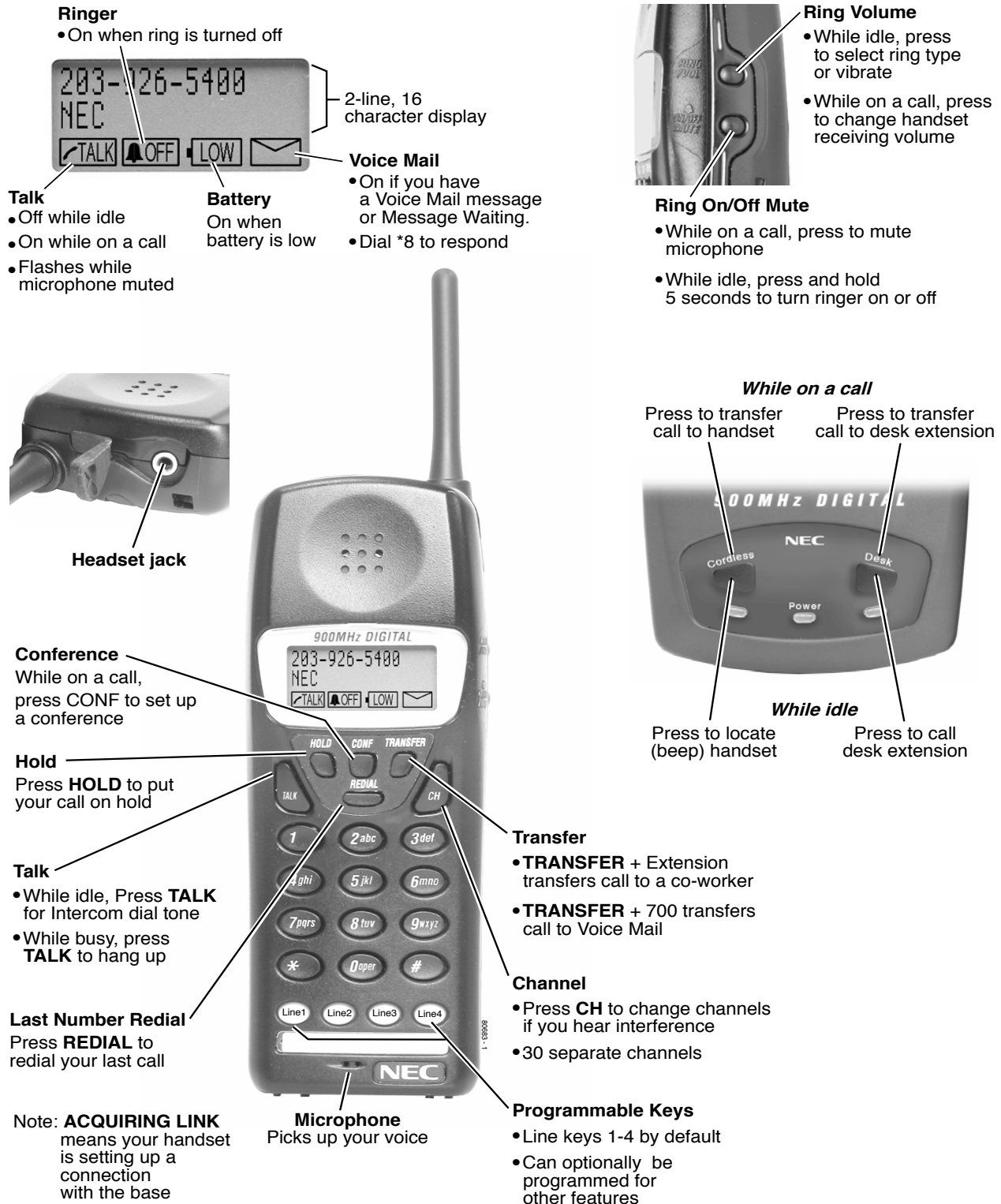


Figure 1: Using Your Handset

Installation

Installing the Base

Connecting the Base

To connect the base to the DS1000/2000 system (Figure 2: Installing the Base):

Be sure to review *Guidelines for Placing the Base*, Figure 3: *Correct Installation Methods*, and Figure 4: *Incorrect Installation Methods* prior to connecting the base unit to the system.

1. Install a modular jack within 6 feet of the base and within 6 feet of an available standard (NEMA 5-15R) 120 VAC outlet.
2. Run a single pair of 24 AWG station cable from the cross-connect block to the modular jack.
3. Terminate the station cable **WHT/BLU - BLU/WHT** leads to the **RED** and **GRN** lugs on the modular jack.
4. Back at the main equipment location, run one pair of cross-connect wire between an *available digital station port* pins on the extension block and cross-connect block to complete the installation.
5. Install bridging clips as required.
6. Plug one end of a modular line cord into the base **LINE IN** jack; plug the other end of the line cord into the modular jack.
 - The DS1000/2000 900 Mhz Cordless Telephone auto-IDs in **1801-Extension Circuit Type** with circuit type 50. No additional programming is required for basic feature operation.

To connect the AC Adaptor to the base:

1. Run the AC adaptor cord under the strain relief on the back of the base as shown.
2. Plug the AC adaptor into AC outlet.
3. Be sure the base antenna is in the vertical position.

Checking the Base LEDs

Normal Operation

- The **Power** LED is on.
- The **Cordless** and **Desk** LEDs are off.

Troubleshooting

- If the **Power** LED is off, the base power supply is not properly connected.
- If the **Desk** LED is flashing, the base is not correctly connected to a digital station circuit in the main equipment.

Guidelines for Placing the Base

- For best results, the base unit should be placed in line-of-site with its handset.
- Cordless telephone range and reception can vary from site to site. Some of the things that may adversely affect range and reception are:
 - Placing the base against or close to a wall (particularly if the wall has metal studs).
 - Positioning the base close to a device that emits Electromagnetic Interference (EMI), such as a TV, radio, computer, fluorescent light, fax machine, or printer.
 - Installing the base close to other 900 Mhz devices, such as Symbol or Telex hand-held inventory devices.
 - Installing the base above a ceiling that uses foil-backed insulation.
 - Installing the base behind a door which can be closed, tinted windows, or one-way glass which will separate the base from the handset.

Installation

Installing the Base

Guidelines for Placing the Base (Cont'd)

- Always raise the base unit antenna to its full vertical position.
- When installing more than one cordless in the same site:
 - Be sure the base units are at least 15 feet apart.
- After installation, change each telephone's channel by pressing **CH** on the handset. This will minimize interference between your cordless telephones.

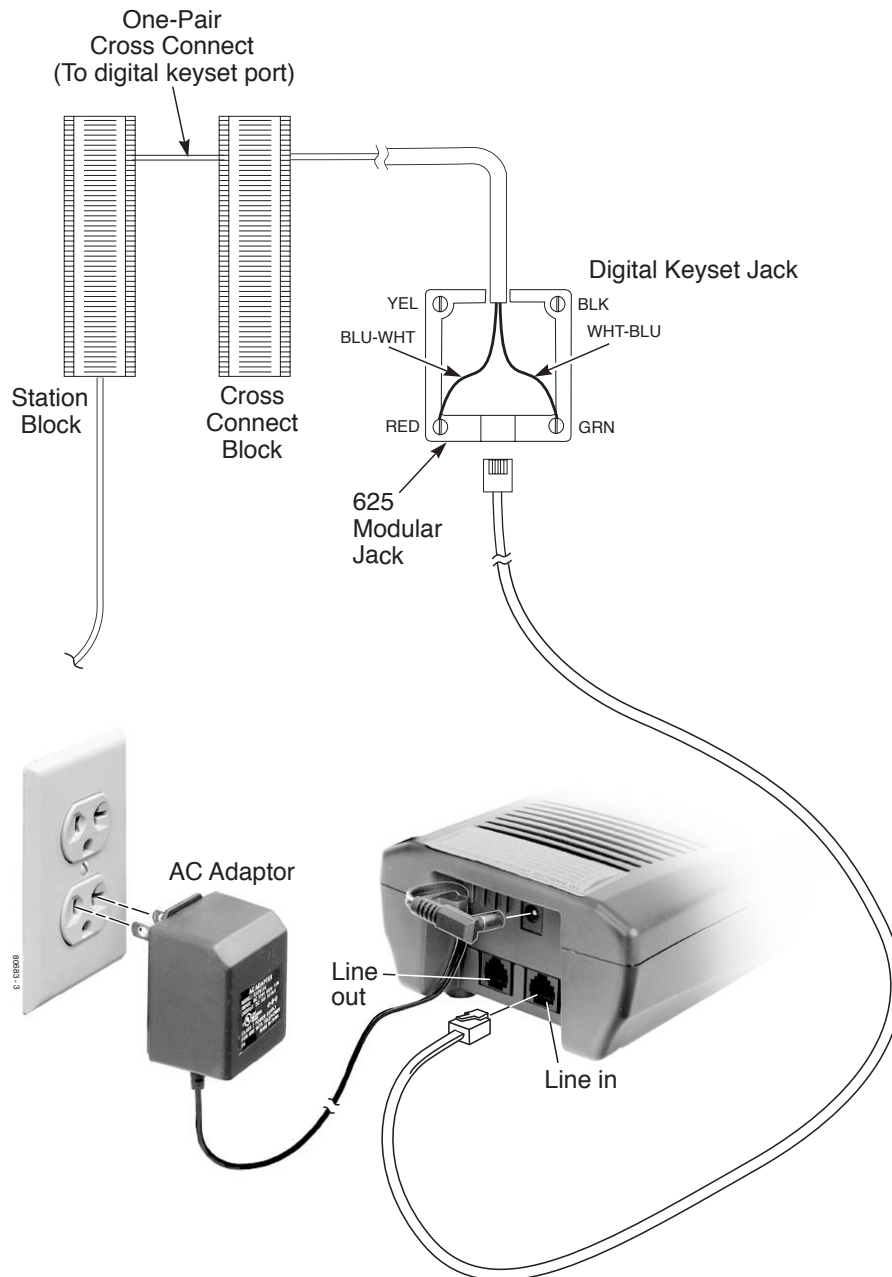


Figure 2: Installing the Base

Installation

Installing the Base

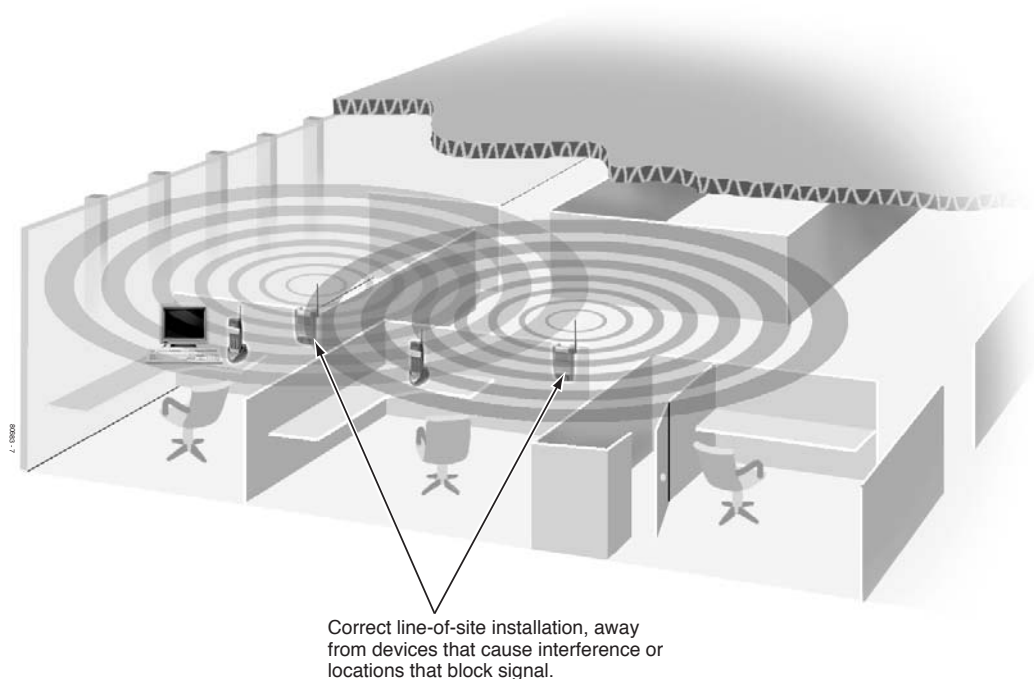


Figure 3: Correct Installation Methods

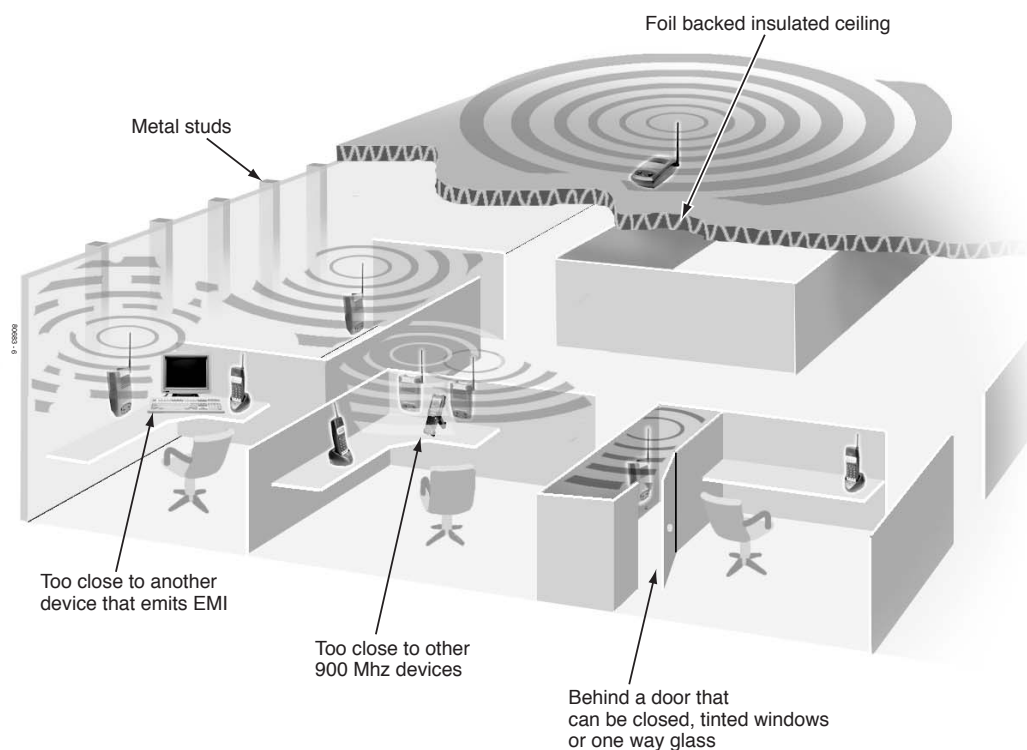


Figure 4: Incorrect Installation Methods

Mounting the Base on the Wall

To mount the base on the wall (*Figure 5: Mounting the Base on the Wall*):

1. Run the base line cord in the wide wire channel as shown, but do not plug it into the base.
2. Run the AC adaptor cord in the narrow wire channel as shown, but do not plug it into the base.
3. Using suitable fasteners, attach the wall-mount bracket to the wall in the desired location.
 - *To make the base easier to remove later on, consider **not** tightening the fasteners all the way.*
4. Snap the base onto the wall-mount bracket.
 - *Make sure the mounting ears fit all the way into their slots and the mounting tabs snap into place.*
5. Connect the base line cord and AC adaptor cord to the base.

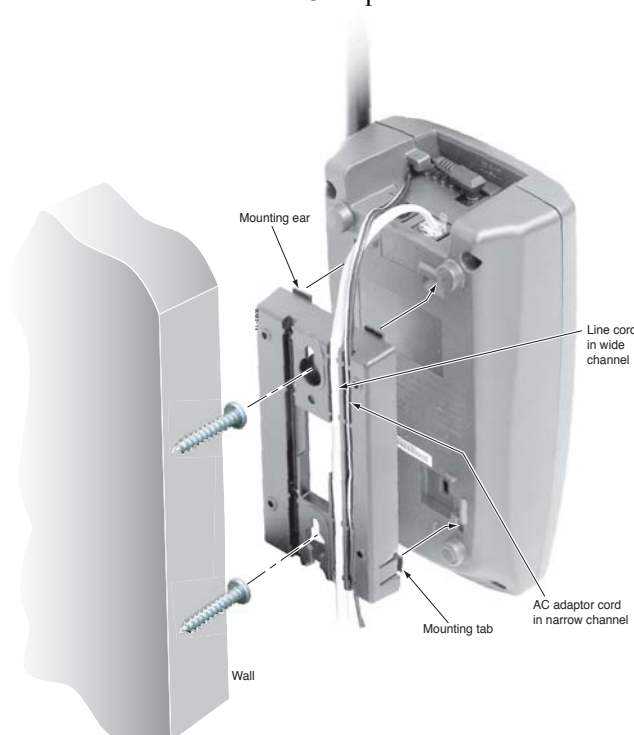


Figure 5: Mounting the Base on the Wall

To remove the base from the wall:

- *If you did not tighten the fasteners, you can slide the base off the wall before going to the next step.*
1. Unplug the line cord and AC adaptor cord from the base.
 2. Press the mounting tabs to release the wall-mount bracket from the base.

1

Installation

Wall-Mounting the Base

Mounting the Base to a Wall Plate

To mount the base on a standard wall plate (*Figure 6: Mounting the Base to a Standard Wall Plate*):

1. Snap the base onto the wall-mount bracket.
 - *Make sure the mounting ears fit all the way into their slots and the mounting tabs snap into place.*
2. Run a customer-provided short line cord in the wide wire channel as shown and plug it into the base.
3. Run the AC adaptor cord in the narrow wire channel as shown and plug it into the base.
4. Plug the other end of the short line cord into the wall plate modular jack.
5. Slide the wall-mount bracket onto the wall plate.

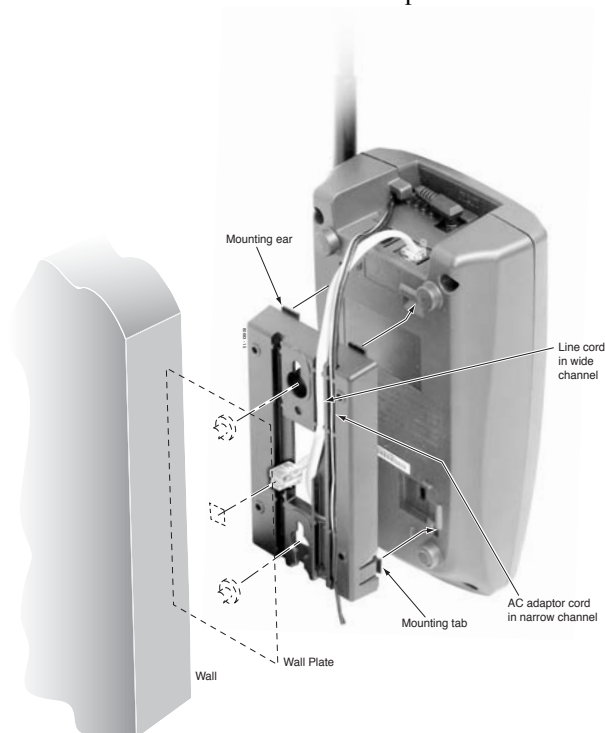


Figure 6: Mounting the Base to a Standard Wall Plate

To remove the base from the wall:

1. Slide the wall-mount bracket off of the wall plate.
2. Unplug the short line cord from the wall plate.
3. Unplug the short line cord and AC adaptor cord from the base.
4. Press the mounting tabs to release the wall-mount bracket from the base.

Installing the Battery in your Handset

To install the battery in your handset (Figure 7: Installing the Handset Battery):

1. Slide the battery cover off of the handset.
2. Insert the battery lead into the battery connector. Be sure to observe the polarity of the connection by lining up the black dot with the black wire.
3. Turn the battery around to it fits into the battery compartment.
4. Slide the battery cover back onto the handset until it snaps into place.

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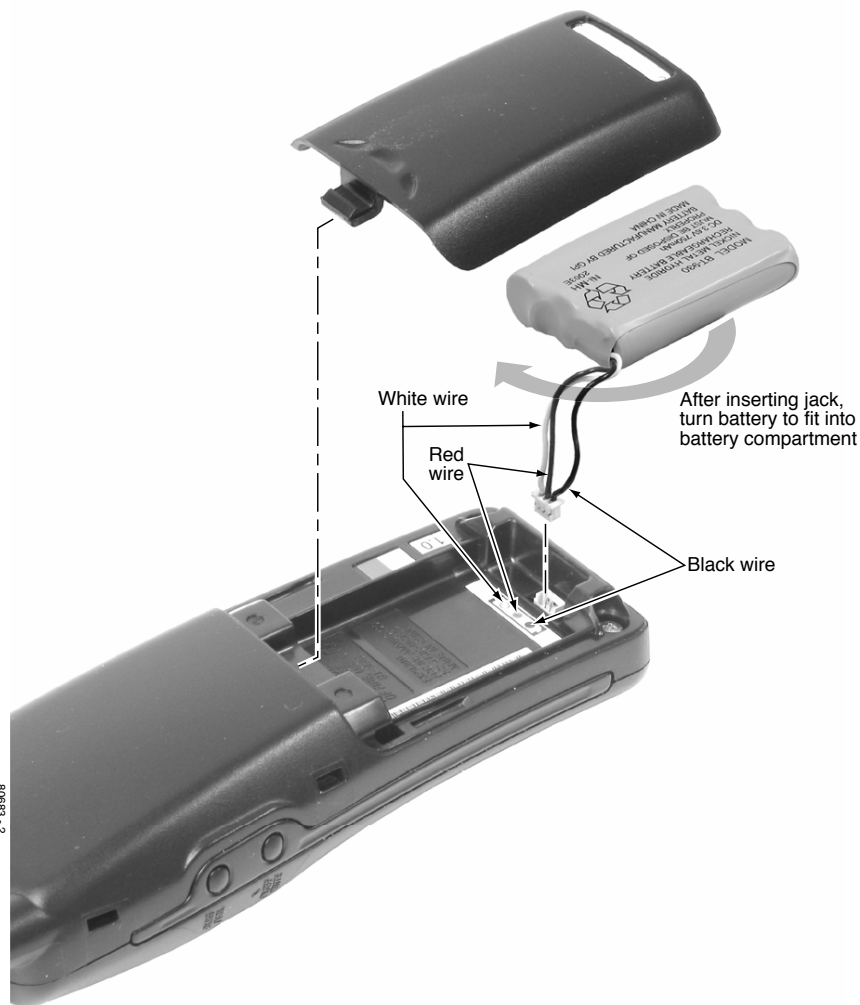


Figure 7: Installing the Handset Battery

Installation

Charging the Handset

Installing the Charger and Charging the Handset

To connect the AC Adaptor to the charger (Figure 8: Installing the Charger):

1. Run the AC adaptor cord under the strain relief on the back of the charger as shown.
2. Plug the AC adaptor cord into the charger.
3. Plug the AC adaptor into AC outlet.
4. Insert the handset into the charger.

The handset must charge 5-8 hours in its charger prior to initial use.

*When the handset is correctly inserted into the charger, the **CHARGE LED** on the charger is on.*

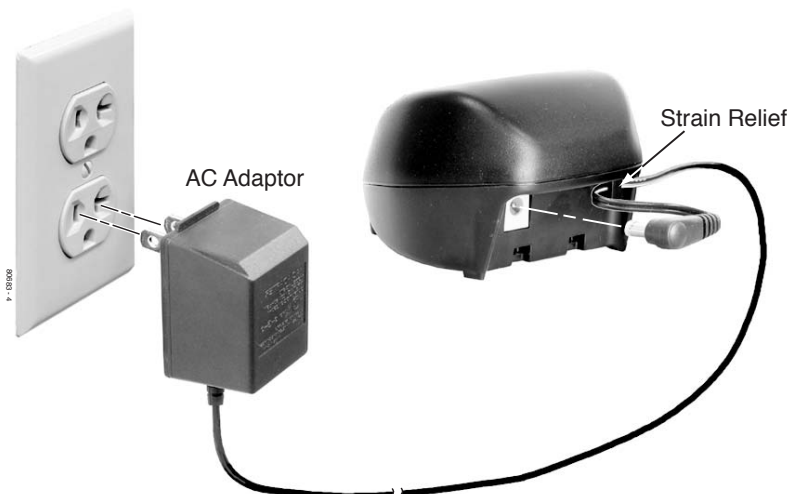


Figure 8: Installing the Charger

Cleaning the Battery Charger Contacts

To clean the battery charger contacts (Figure 9: Cleaning the Battery Charger Contacts):

- Use a pencil eraser or soft cloth to periodically (once a month) clean the battery contacts.



Figure 9: Cleaning the Battery Charger Contacts

Wall-Mounting the Charger

To wall-mount the charger (*Figure 10: Wall-Mounting the Charger*):

1. Choose a suitable location for the charger wall-mount bracket within 6 feet of an AC outlet.
2. Install suitable fasteners 1 3/16" apart, leaving the heads out about 1/4".
3. Run the AC adaptor cord through the notch in the bottom of the wall-mount bracket and up through the rectangular cutout in the bracket.
4. Place the wall-mount bracket on the fasteners and tighten.
5. Run the AC adaptor cord through the strain relief on the back of the charger, then plug the cord into the charger.
6. Snap the charger onto the wall-mount bracket.
7. Plug the AC adaptor into the AC outlet.

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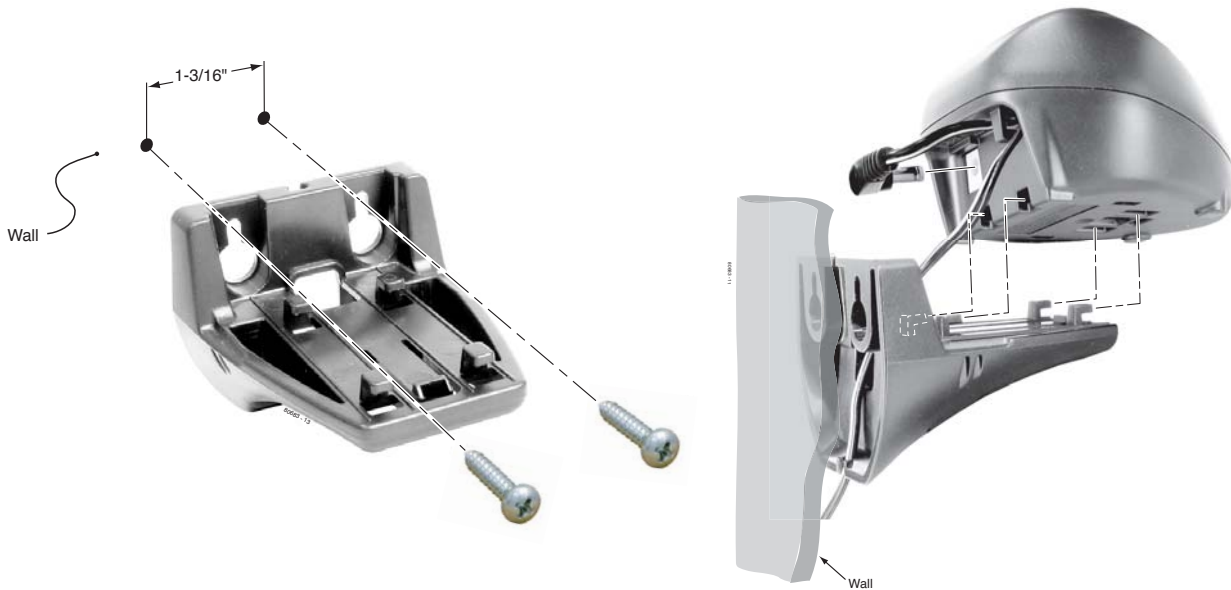


Figure 10: Wall-Mounting the Charger

Installation

Using the Belt Clip

Installing the Belt Clip

To install the belt clip (*Figure 11: Installing the Belt Clip*):

- With the open end of the clip facing away from the antenna, snap the belt clip onto the handset.

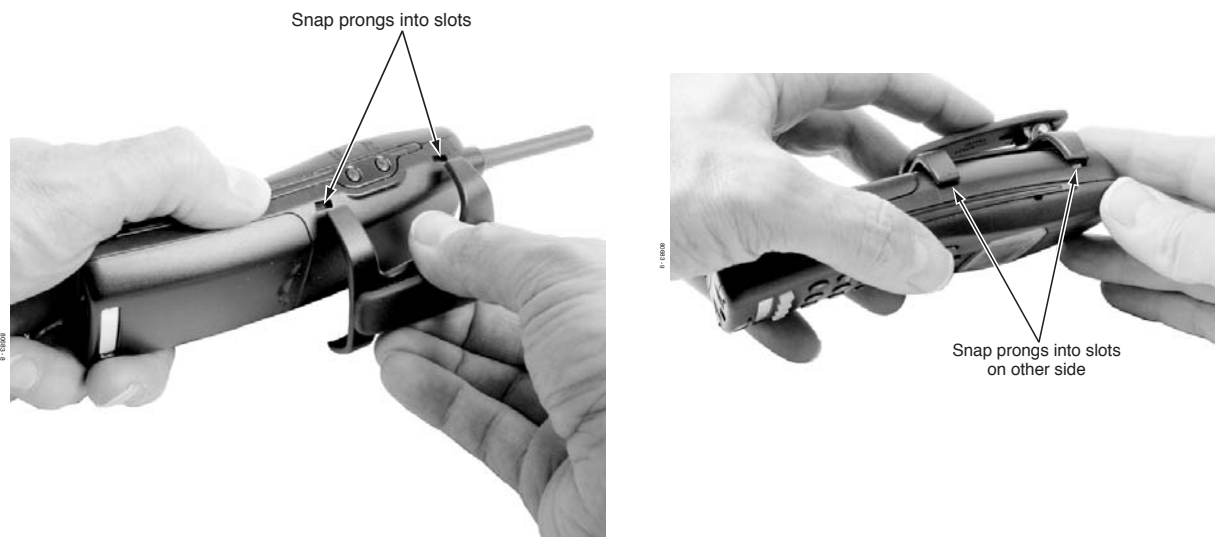


Figure 11: Installing the Belt Clip

To remove the belt clip (*Figure 12: Removing the Belt Clip*):

- Gently pry the belt clip prongs out of the slots in the handset.

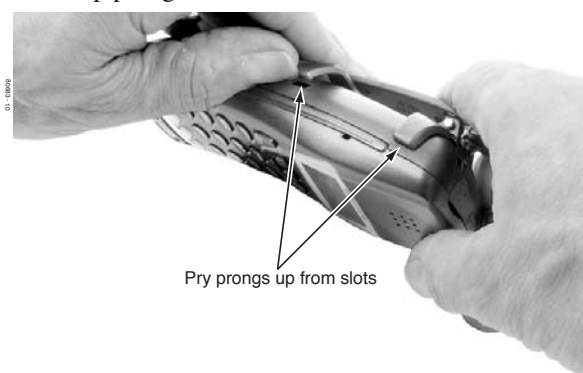


Figure 12: Removing the Belt Clip

Installation

Using the Earloop Style Headset with your Cordless Telephone

Installing Headset P/N 750638 (M145 Earloop Style)



1

Figure 13: Headset P/N 750638 (Ear Loop Style)

Earloop Installation

To install the earloop (recommended) (Figure 14: Installing the Ear Loop):

- Hook the earloop onto the headset and snap into place.
 - Installation for the right ear is shown. For the left ear, hook the earloop on the opposite side of the headset and reverse the microphone boom.

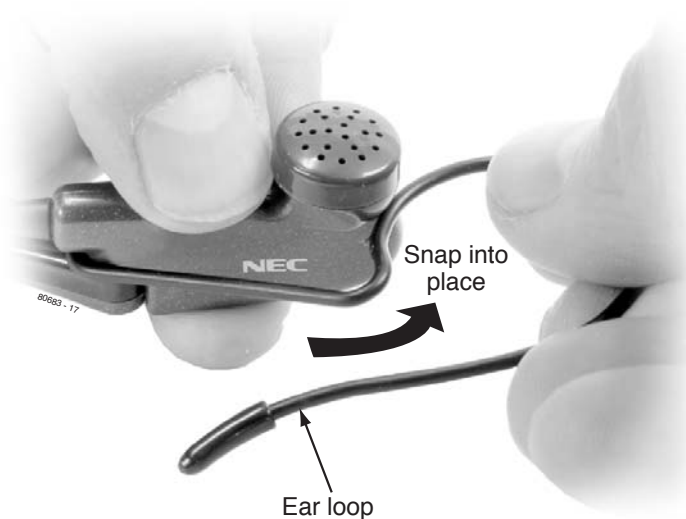


Figure 14: Installing the Ear Loop

Installation

Using the Earloop Style Headset with your Cordless Telephone

Ear Cushion Installation

To install the ear cushion (*Figure 15: Installing the Ear Cushion*):

- Pull the ear cushion over the earpiece.



Figure 15: Installing the Ear Cushion

Installation

Using the Earloop Style Headset with your Cordless Telephone

Connecting the Headset and Using the Controls

To connect the headset and use the controls (*Figure 16: Connecting the Headset*):

- Plug the headset into the **Headset Jack** on the top of the handset.
- Use the **Microphone Volume** control to adjust the volume of your headset's microphone (i.e., your voice).
- Use the **Headset Receiver Volume** control to adjust the volume of the receiver in your headset (i.e., your caller's voice).
- To temporarily turn off your headset microphone, slide the **Microphone Mute** switch into the *Microphone Muted* position.
- Clip the **Belt/Lapel Clip** to your belt or lapel to secure the headset cord.

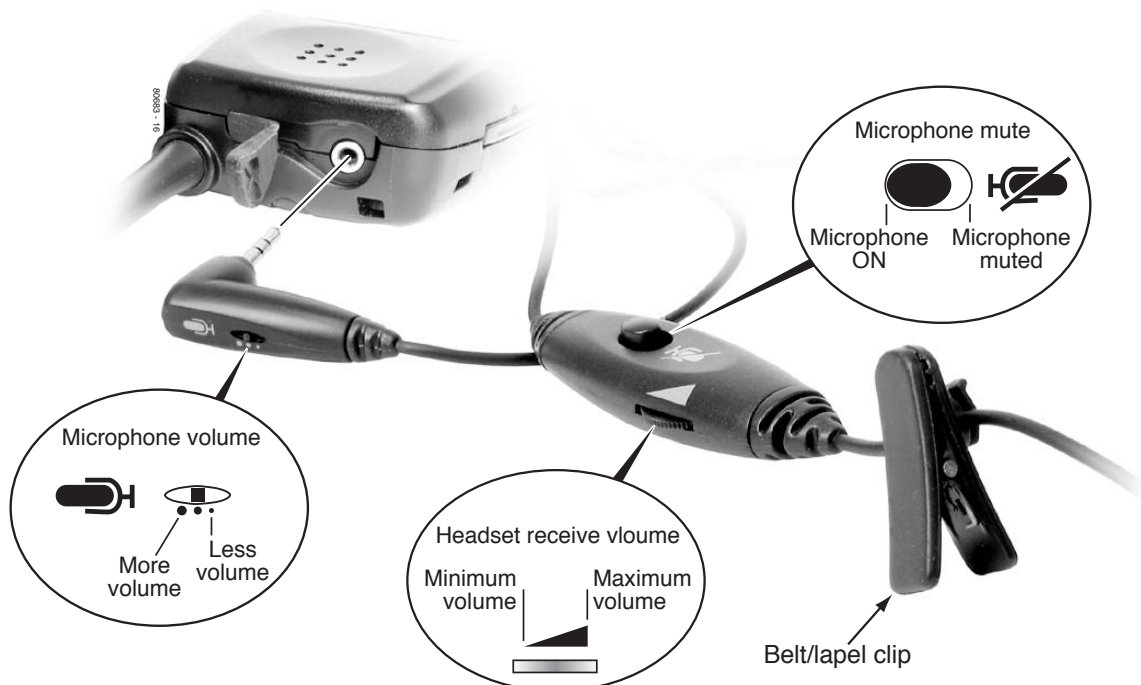


Figure 16: Connecting the Headset

Installation

Using the Headband Style Headset with your Cordless Telephone

Installing Headset P/N 750637 (M175 Headband Style)



Figure 17: Headset P/N 750637 (Headband Style)

Optional Earloop Installation

To install the optional earloop:

- Snap the head band out of the ear piece.



Figure 18: Installing the Optional Earloop

Installation

Using the Headband Style Headset with your Cordless Telephone

- Remove the ear cushion.

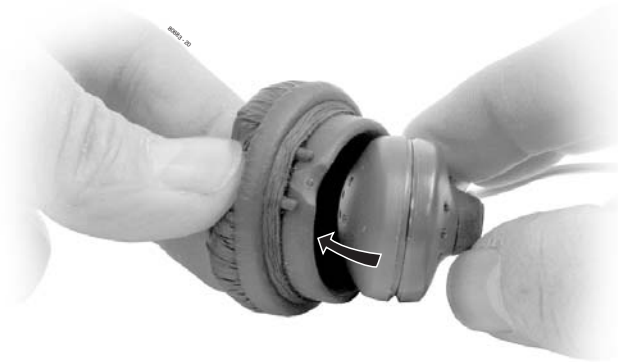


Figure 19: Removing the Ear Cushion

- Snap on the earloop ring. (Make sure the earloop ring lies flat against the microphone boom as shown.)

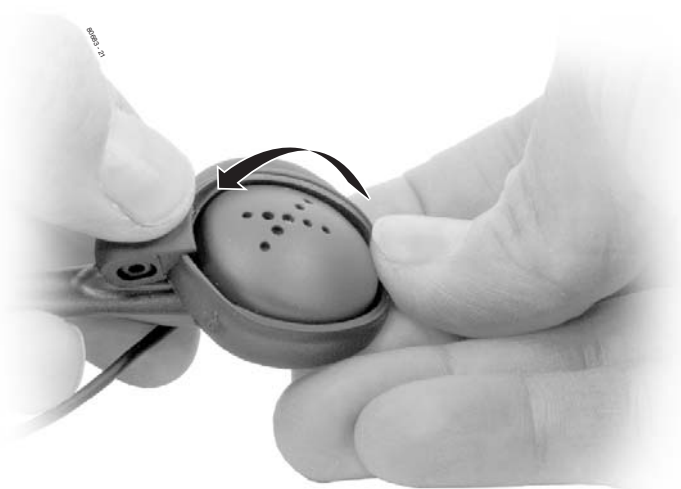


Figure 20: Snapping on the Earloop Ring

- Insert the earloop into the earloop ring. (Installation for the right ear is shown. For the left ear, insert the earloop from underneath the earloop ring.)



Figure 21: Inserting the Earloop into the Earloop Ring

1

Installation

Using the Headband Style Headset with your Cordless Telephone

Connecting the Headset and using the Controls

To connect the headset and use the controls (Figure 22: Connecting the Headset and Using the Controls):

- Plug the headset into the **Headset Jack** on the top of the handset.
- Use the **Microphone Volume** control to adjust the volume of your headset's microphone (i.e., your voice).
- Use the **Headset Receiver Volume** control to adjust the volume of the receiver in your headset (i.e., your caller's voice).
- To temporarily turn off your headset microphone, slide the **Microphone Mute** switch into the *Microphone Muted* position.
- Clip the **Belt/Lapel Clip** to your belt or lapel to secure the headset cord.

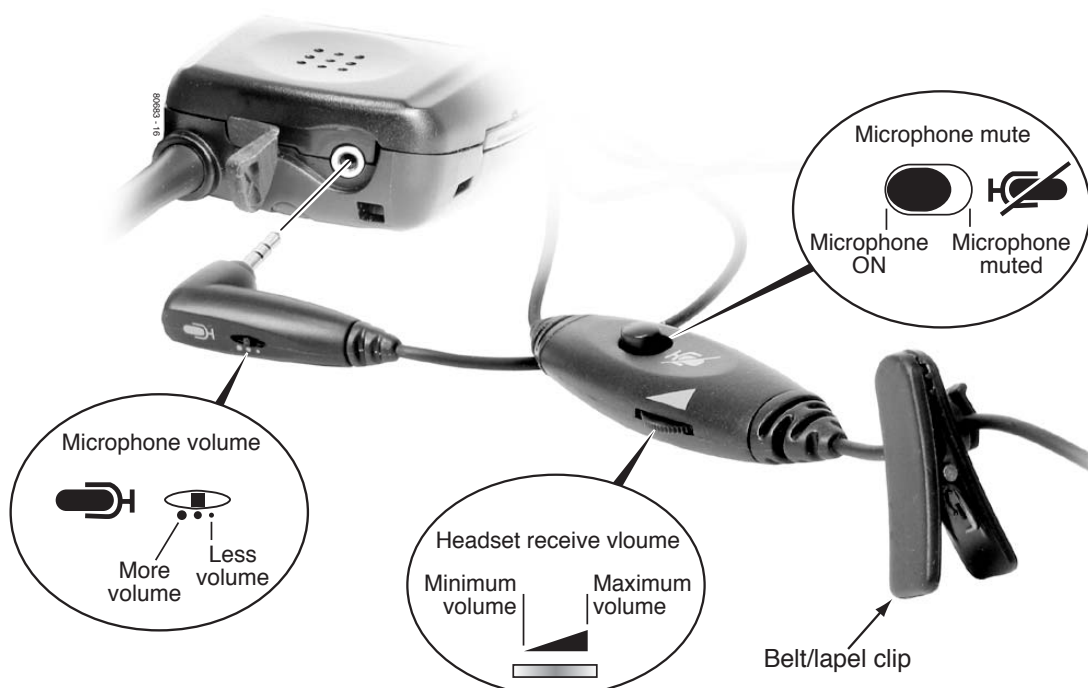


Figure 22: Connecting the Headset and Using the Controls

Specifications

DS1000/2000 Cordless Telephone Specifications	
Transmission and Reception	
Transmission Method	900 MHz Digital Narrow Band FM
Receive/Transmit Frequency	902-905 MHz & 925-928 MHz
Frequency Control	Phase Lock Loop
PCM Type	32 Kbps ADPCM (Adaptive Differential Pulse Code Modulation)
Range	Up to 350 feet (depending on installation site) See <i>Guidelines for Placing the Base</i> on page 4 for some of the factors that affect range.
Bandwidth	± 50 KHz
Data Transmission Speed	688 BPS
Transmit Power4 mW approx.
Simultaneous Conversations (Channels)	30
Handset Battery	
Type	3.6V 750 mAh Nickel Metal Hydride Rechargeable Battery Pack
Charge Time	5-6 Hours max. to full charge
Life	Up to 7 hours talk time Up to 5 days standby
Power Requirements	
Power Supplies	
Charger (supplied)	9 VDC (yellow color-coded connector)
Base (supplied)	10 VDC (black color-coded connector)
Mechanical	
Handset	
Size	2" W x 1 1/4" D x 5 1/2" H (without antenna)
Weight	Approximately 5.1 oz. (with battery)
Base	
Size	4 1/4" W x 7 5/8" D x 2 1/4" H (without antenna)
Weight	Approximately 13.3 oz.
Charger	
Size	3 1/4" W x 3 1/2" D x 2 1/16" H
Weight	Approximately 2.3 oz.

Installation

Specifications and Parts

DS1000/2000 Cordless Telephone Specifications	
Environmental	
Environmental Specifications	Maintain the same environmental conditions as you would for your DS1000/2000 keysets.
Miscellaneous	
Display Type	16 character, 2-line LCD with 4 Status Icons
Distinctive Ringing	3 ring tones (two volume levels each) and vibrate
The DS1000/2000 Cordless Telephone is hearing-aid compatible.	

Parts and Accessories

DS1000/2000 Cordless Telephone Parts and Accessories	
Part Number	Description
80683	DS1000/2000 Cordless Telephone
730632	EXP 9385 Charger Unit without AC Adaptor
730619	AD-970 AC Adaptor for Charger Unit
730618	EXP 9704 AC Adaptor for Base Unit
730634	EXP 9302 Belt Clip
750637	NEC Cordless Headset (M175 - Headband style)
750638	NEC Cordless Headset (M145 - Earloop style)
730631	BT-930 Replacement Battery (Ni-Mh, DC 3.6V 750 mAh)
730633	EXP 9360 Wall Mount Bracket for Charger Unit
730608	EXP 9660 Wall Mount Bracket for Base Unit

Chapter 2: Features

2

Feature Operation

Barge In

Barge In is disabled by default.

To Barge In on an extension or line:

1. Call busy extension or place call on busy line.
2. Dial 4. (You hear 2 beeps.)
3. Join in the conversation in progress.

Call Coverage Keys

There are no Call Coverage keys assigned by default.

Call Coverage Key Flash Rates	
When the key is:	The covered extension is:
Off	Idle or not installed
On	Busy
Flashing Slowly	Ringing
Flashing Fast	In DND for intercom calls (option 2) or all calls (option 3)
Wink Off	In DND for outside calls (option 1)

To answer a call ringing or flashing a Call Coverage key:

1. Press the flashing Call Coverage key.

Feature Operation

To use your Call Coverage key to place a call to your idle co-worker:

1. Press the Call Coverage key.

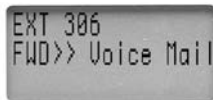
Call Forwarding

Call Forwarding is enabled by default.

To activate Call Forwarding:

1. Press **TALK** and dial ***3**.
2. Dial the Call Forwarding type:
 - 0** = Cancel your extension's Call Forwarding
 - 2** = Call Forwarding Busy/No Answer
 - 4** = Call Forwarding Immediate
 - 6** = Call Forwarding No Answer
3. Dial the destination extension, 0 for your operator, or the Voice Mail master number (e.g., 700).
4. Dial **2** to forward all calls; **8** to forward just outside calls.

The second line of the handset display shows that Call Forwarding is enabled (**FWD**) and the destination extension (number, name or **Voice Mail**).



Call Forwarding Off Premise

Call Forwarding Off Premise is disabled by default.

To activate Call Forwarding Off Premise:

1. Have your System Administrator set up your Personal Speed Dial bins.
2. Press **TALK** and dial ***33 + 2**.
3. Dial the Personal Speed Dial bin number (701-720) that Call Forwarding Off Premise should dial to forward your calls.
4. Press **HOLD**.
5. Dial **2** to forward all calls; **8** to forward just outside calls.

The second line of the handset display shows that Call Forwarding is enabled (**FWD**) and the destination number or name.

Call Waiting / Camp On

Call Waiting / Camp On is enabled by default.

To Camp-On to a busy extension:

1. Call a busy co-worker.
2. Dial **2**, but do not hang up.
 - If you hang up, the system converts your Camp-On to a Callback.
3. When your co-worker becomes free, you hear ringback.
4. Speak to your co-worker when they answer their waiting call.

Callback

Callback is enabled by default.

To leave a Callback at a busy co-worker:

1. Call your busy co-worker.
2. Dial **2** and hang up.
 - *If you stay on the line, you will Camp-On to your busy co-worker.*
3. When your busy co-worker becomes free, your phone will automatically ring.
4. Press **TALK** to answer.
5. Speak to your co-worker when the call goes through.

Caller ID

Caller ID is disabled by default.

If enabled in the system and provided by your telephone company, the handset display will show the Caller ID information as the call is ringing.

- *Second Call Caller ID and Third Party Caller ID Check are not available.*

2

Central Office Calls, Answering

Central Office Calls, Answering is enabled by default.

To answer an outside call ringing your phone:

1. Press **TALK**.
 - *Your handset will not vibrate while it is in its charger base.*

Central Office Calls, Placing

Central Office Calls, Placing is enabled by default.

To place an outside call using a line or loop key:

1. Press the line or loop key.

To place an outside call over a specific line using Line Dial-Up:

1. Press **TALK**.
2. Dial **#9**.
3. Dial the line number (e.g., 01 for line 1).

To place an outside call using Direct Line Access):

1. Press **TALK**.
2. Dial **1**.
3. Dial the line number (e.g., 01 for line 1).

Feature Operation

To place an outside call using Line Group Access:

1. Press **TALK** and dial a Line Group Access Code (90-98).
 - *If you hear dial tone as soon as you dial 9, your system has Line Group Routing. A line group has been automatically selected for you.*

Conference

Conference is enabled by default.

To set up a Conference:

1. Establish Intercom or outside call.
2. Press **CONF**.
3. Dial extension you want to add,
OR
Place or answer an outside call,
OR
Retrieve call from Park Orbit.
4. Press **CONF** to set up the Conference.
 - *You see: **CONFERENCE CALL***

Directed Call Pickup

Directed Call Pickup is enabled by default.

To use Directed Call Pickup to intercept a call to a co-worker's extension:

1. Press **TALK**.
2. Dial ******.
3. Dial your co-worker's extension number.
 - *To pick up a call ringing an attendant, dial the attendant's extension number (e.g., 300). Do not dial 0 or 01-04.*

Distinctive Ringing

Distinctive Ringing is enabled by default.

To change your handset's ringing tone:

- Outside calls ring with two short rings followed by one long.
- Intercom calls ring with one long ring.

1. While idle, press **RING/VOL**.

- You hear the selected ringing tone. The tone will ring for about 2 seconds unless you press **RING/VOL** to select another tone.
- There are four ring tones from which to choose. The default setting is hi-lited.

Display Name	Description
Ring Type A High	High pitch ring, loud
Ring Type A Low	High pitch ring, soft
Ring Type B High	Low pitch ring, loud
Ring Type B Low	Low pitch ring, soft
Ring Type C High	High pitch warble, loud
Ring Type C Low	High pitch warble, soft
Ring Off	Vibrate ¹
¹ While the handset is in the charger, the <i>Ring Off</i> setting uses <i>Ring Type A Low</i> .	

To turn the ringer off:

1. While your phone is idle, press and hold **ON/OFF MUTE** for five seconds.
- The **OFF** icon will display indicating that the ringer is off.

Do Not Disturb Override

Do Not Disturb Override is disabled by default.

To use Do Not Disturb Override:

1. Dial your co-worker.
2. When you hear DND tone, dial **1**.
3. The system automatically places a ringing Intercom call to your co-worker.

Extension Hunting

Extension Hunting is disabled by default.

To temporarily install or remove your extension from your UCD group:

1. Press **TALK**.
2. Dial ***5**, then . . .
3. Dial **4** to return your extension to your group, or
Dial **6** to remove your extension from your group.

Feature Operation

Forced Trunk Disconnect

Forced Trunk Disconnect is disabled by default.

To disconnect a busy outside line:

1. Press line key for busy outside line.
OR
Press **TALK** and dial the line's Line Access Code (e.g., 101 for line 1).
2. Dial **#** to disconnect the line.
3. Press line key and dial the number you want to call.

Group Call Pickup

Group Call Pickup is disabled by default.

To answer a call ringing a phone in your Pickup Group:

1. Press **TALK** and dial ***#**.
OR
Press the flashing Group Pickup key.

Group Ring

Group Ring is disabled by default.

To answer a call ringing into your Ring Group:

1. Press **TALK**.

Hold

Hold is enabled by default.

To place an outside call on System Hold:

1. Press **HOLD**.
 - The line key flashes fast to indicate that it is on Hold.
 - The line will recall with a distinctive "wink-on" flash rate if you leave it on Hold too long.

To place an outside call on Exclusive Hold:

1. Press **HOLD** twice.
 - The line key flashes with a distinctive "wink-on" flash rate to show when it is on Hold or recalling.

To place an Intercom call on Hold:

1. Press **HOLD**.

To pick up an outside call on Hold:

1. Press the flashing line key.

To pick up an Intercom call on Hold:

1. Press **TALK + HOLD**.

Hotline

Hotline is disabled by default.

Hotline Key Flash Rates	
When the key is:	The covered extension is:
Off	Idle or not installed
On	Busy
Flashing Fast	In DND for intercom calls (option 2) or all calls (option 3)
Wink Off	In DND for outside calls (option 1)

To place a call to your Hotline partner:

1. Press your Hotline key.

To Transfer your outside call to your Hotline partner:

1. While on the call, press your Hotline key.
2. (Optional) Announce the call.
3. Press **TALK** to hang up and Transfer the call.

To answer a call from your Hotline partner.

1. Press **TALK**

Intercom

Intercom is enabled by default.

To place an Intercom call:

1. Press **TALK** + Dial your co-worker's extension number.
 - To call a Door Box, dial the Door Box extension number. You cannot control the Door Box relay.

To answer an Intercom call ringing your phone:

1. Press **TALK**.

Last Number Redial

Last Number Redial is enabled by default.

To redial your last call:

1. Press a line key + **REDIAL**.

2

Feature Operation

Meet Me Conference

Meet Me Conference is enabled by default.

To set up a Meet-Me Conference:

1. Press **TALK**.
2. Dial ***1** + Dial a page zone number + Announce Meet-Me Conference code (#11 or #12).
3. Press **TRANSFER** + Dial the announced Meet-Me Conference code.

To join a Meet-Me Conference:

1. Listen for page announcing the Meet-Me Conference.
2. Press **TALK**.
3. Dial the announced Meet-Me Conference code (#11 or #12).

Message Waiting

Message Waiting is available by default, but only in systems without Voice Mail installed.

To leave a Message Waiting:

1. Place Intercom call to co-worker + Dial **8**.
 - *The extension you call can be unanswered, busy, or in Do Not Disturb.*

To answer a Message Waiting:

- *Your "New Mail" icon indicates that you have a Message Waiting.*
1. Press **TALK** + Dial ***8**.

Microphone Mute

Microphone Mute is enabled by default.

To mute your handset's microphone:

1. While on a call, press **ON/OFF MUTE**.
 - *The TALK icon flashes while your microphone is muted.*

To cancel Microphone Mute:

1. While on a call, press **ON/OFF MUTE**.
 - *The TALK icon stops flashing.*
 - *Microphone Mute automatically cancels when you hang up.*

Monitor / Silent Monitor

Monitor / Silent Monitor is disabled by default.

To Monitor a call:

1. Call busy co-worker + Dial **6**.

Night Service / Night Ring

Night Service is disabled by default.

To activate or deactivate Night Service:

1. Press your Night key.

To answer a call ringing the paging system at night:

1. Press **TALK** + Dial ***0**.

Off-Hook Signaling

Off-Hook Signaling (Camp-On tones) is available for Intercom calls by default.

While busy on a call, you can receive Camp-On tones when another call is trying to get through.

Paging

Paging is available by default.

To make an Internal Paging Announcement:

1. Press **TALK**.
2. Dial ***1**.
3. Dial the Page Zone number (1-7 or 0 for All Call).
4. Make announcement and hang up.

Park

Park is available by default.

To Park a call in a System Park Orbit:

1. While on an outside call, press **TRANSFER**.
2. Dial ***** and the System Park Orbit (60-69).
3. Press **TALK** to hang up.

To retrieve a call from a System Park Orbit:

1. Press **TALK** + Dial ***** and the System Park Orbit (60-69).

To Park a call at a co-worker's extension (using Personal Park):

1. While on an outside call, press **TRANSFER**.
2. Dial ******.
3. Dial the number of the extension at which you want to Park the call.
4. Press **TALK** to hang up.

To retrieve a call parked at a co-worker's extension:

1. Press **TALK** + Dial ****** and the number of the extension at which the call is parked.

Feature Operation

Prime Line Preference

Intercom Prime Line Preference is enabled by default.

To place a call on your Prime Line:

1. Press **TALK** + Dial the call normally.
 - *To bypass your Prime Line, press another line key before pressing TALK.*

Privacy Release Groups

Privacy Release Groups is disabled by default.

To join an outside call with a member of your Privacy Release Group:

1. Press the busy line key.
 - *Your display shows: **CONFERENCE CALL***

To prevent a member of your Privacy Release Group from joining your call:

1. Place or answer an outside call on a line key.
2. Press the line key.
3. Press the line key again to allow a co-worker to join in.

Programmable Function Keys

By default, keys 1-4 are line keys for outside lines 1-4. *You can only set up cordless telephone function keys from system programming.*

Cordless Telephone Programmable Function Keys			
Description	Code	BLF	Operation
Undefined	00	-	-
Loop Key, Switched	01	<u>Off:</u> Idle <u>On:</u> You are on a loop key call. <u>Slow Flash:</u> Call is ringing the loop key	<u>Incoming:</u> Press key to answer outside call. <u>Outgoing:</u> Press key + Dial trunk group (0-9) to place call.
Loop Key, Fixed	02 + Trunk Group (90-98)	<u>Off:</u> Idle <u>On:</u> You are on a loop key call. <u>Slow Flash:</u> Call is ringing the loop key	Press key to place or answer outside call.
Line Key	03 + Trunk number (e.g., 1)	<u>Off:</u> Idle <u>On:</u> Line busy <u>Slow Flash:</u> Line ringing	Press key to place or answer outside call.
Park Orbit Key	04 + System Orbit (60-69)	<u>Off:</u> Park Orbit idle. <u>On:</u> Call parked in orbit by a co-worker <u>Fast Flash:</u> Has a call you parked.	Press key to Park or retrieve call.

Cordless Telephone Programmable Function Keys			
Description	Code	BLF	Operation
Hotline Key	05 + Partner's extension	<u>Off</u> : Partner is idle <u>On</u> : Partner is ringing or busy <u>Fast Flash</u> : Partner in DND for Intercom calls (option 2) or all calls (option 3). <u>Wink Off</u> : Partner in DND for outside calls (option 1)	Press key to call or Transfer to Hotline partner.
Call Coverage Immediate Ring	06 + Covered extension	<u>Off</u> : Covered extension idle. <u>On</u> : Covered extension busy. Slow Flash: Co-worker ringing <u>Fast Flash</u> : Covered extension in DND for Intercom calls (option 2) or all calls (option 3). <u>Wink Off</u> : Covered extension in DND for outside calls (option 1)	Press key to call or pick up a call ringing the covered extension.
Call Coverage No Ring	07 + Covered extension		
Call Coverage Delay Ring	08 + Covered extension		
Group Pickup Immediate Ring	09 + Pickup Group (1-8)	<u>Off</u> : Call not ringing pickup group <u>Slow Flash</u> : Call ringing pickup group	Press key to answer call ringing pickup group.
Group Pickup No Ring	10 + Pickup Group (1-8)		
Group Pickup Delay Ring	11 + Pickup Group (1-8)		
Page Zone Key	13 + Page Zone (1-7, 0 for all call)	<u>Off</u> : Page Zone idle. <u>On</u> : Page Zone busy.	Press to Page into the assigned zone.
System Speed Dial Key	14 + System bin number (200-299)	No BLF.	Press to dial stored number.
Personal Speed Dial Key	15 + Personal bin number (701-720)		
Call Timer Key	Not available.		
Voice Mail Record Key	17	<u>Off</u> : Recording off. <u>On</u> : Recording being set up. <u>Fast Flash</u> : Recording on.	Press to start and stop recording conversation into mailbox.
Night Key	18 + CLEAR	<u>Off</u> : System in Day Mode. <u>On</u> : System in Night Mode.	Press to switch the day/night mode of the system.
Split Key	20	No BLF.	Press to switch between calls. See the <i>Split</i> feature for more.
ICM Directory Key	Not available.		
Reverse Voice Over Key	23 + Covered extension	<u>Off</u> : Covered extension idle. <u>On</u> : Covered extension busy. Slow Flash: Co-worker ringing <u>Fast Flash</u> : Covered extension in DND for Intercom calls (option 2) or all calls (option 3). <u>Wink Off</u> : Covered extension in DND for outside calls (option 1)	<ul style="list-style-type: none">While on a handset call, press key to place private Intercom call to co-worker.While idle, press to call co-worker.

Feature Operation

Cordless Telephone Programmable Function Keys			
Description	Code	BLF	Operation
Message Center / Voice Mail Key	24 + Your extension or Message Center Extension	Off: No messages in associated mailbox Fast Flash: Messages are waiting in associated mailbox	<ul style="list-style-type: none">• TALK + Press to call associated mailbox.
Save Key	25	No BLF	<ul style="list-style-type: none">• While on a call, press key to Save number you just dialed.• While idle, press key to redial previously saved number.
Account Code Key	26	Off: Account Code inactive. On: Account Code active for call. Fast Flash: Account Code entry mode.	Press to enter Account Code, then press again to return to call.
Call Forwarding Key	27	Off: Call Forwarding disabled. Fast Flash: Extension in Call Forwarding programming mode. Wink Off: Call Forwarding enabled.	<ul style="list-style-type: none">• While idle, enters Call Forwarding programming mode (the same as pressing TALK and dialing *3).• While busy, switches Call Forwarding on and off.
Headset Key	Not available.		

Removing Lines and Extensions

Removing Lines and Extensions is disabled by default.

To removes lines and extensions from service:

1. Press **TALK**.
2. Dial **#40**.
3. Dial the number of the extension you want to remove or return to service (e.g., 300).
OR
Dial the number of the trunk you want to remove or return to service (e.g., 101).
4. Dial **4** to return or **6** to remove.

Reverse Voice Over

Reverse Voice Over is disabled by default.

Reverse Voice Over Key Flash Rates	
When the key is:	The covered extension is:
Off	Idle or not installed
On	Busy
Flashing Fast	In DND for intercom calls (option 2) or all calls (option 3)
Wink Off	In DND for outside calls (option 1)

To place a Reverse Voice Over call:

1. While on a handset call, press and hold your Reverse Voice Over key.
 - *You hear two beeps, then conversation with your co-worker in your handset.*

To return to your initial caller:

1. Release your Reverse Voice Over key.

To place a call to the co-worker assigned to your Reverse Voice Over key:

1. While your handset is idle, press your Reverse Voice Over key.
 - *You hear two beeps, then conversation with your co-worker.*

2

Ringling Line Preference

Ringling Line Preference is enabled by default.

- With Ringling Line Preference enabled, pressing **TALK** will answer the ringing call.
 - *To bypass Ringling Line Preference, press a line key or Programmable Function Key before pressing **TALK**.*
- With Ringling Line Preference disabled, pressing **TALK** will provide Intercom dial tone (instead of answering the ringing call).

Save Number Dialed

Save Number Dialed is disabled by default.

To save the outside number you just dialed:

1. Press your Save Programmable Function Key.

To redial the saved number:

1. Press your Save Programmable Function Key.
 - *If the line you select is busy, you may be able to dial 2 to wait for the line to become free.*

Feature Operation

Speed Dial

There are no Speed Dial numbers stored by default.

Note: You cannot program Personal or System Speed Dial bins from your Cordless Telephone. See your Communications Manager.

To dial a System Speed Dial number:

1. Press **TALK** + Dial # + Dial the bin number (e.g., 200).

To dial a Personal Speed Dial number:

1. Press **TALK** + Dial # + Dial the bin number (e.g., 200).

Split

Split is disabled by default.

You must have a Split key programmed to use this feature. Refer to the Programmable Function Keys feature for more.

To Split between your current Intercom call and a new Intercom call:

1. Press **HOLD** to place your current Intercom call on Hold.
2. Wait for your display to return to idle.
3. Place or answer second Intercom call.
4. Press the Split key to switch between your two Intercom calls.

To Split between your current outside call and an Intercom call:

1. Press **TRANSFER** to place the outside call on Hold.
2. Place or answer waiting Intercom call.
3. Press the Split key to switch between the Intercom call and the outside call.

To Split between your current Intercom call and an outside call:

1. Press **HOLD** to put your Intercom call on Hold.
2. Press a line key to place or answer your outside call.
3. Press your Split Programmable Function Key to switch between the calls.

To Split between your current outside call and a waiting Intercom call:

1. Press **TRANSFER** to place your current outside call on Hold.
2. Press **TALK** to hang up.
3. Place or answer new outside call.
4. Press the Split key to switch between your two calls.

Tandem Trunking

Tandem Trunking is disabled by default.

To set up a tandem call (Unsupervised Conference):

1. Place or answer an outside call.
2. Press **CONF**.
3. Place or answer another outside call.
4. Press **CONF + TALK** to hang up.
 - You can optionally press **HOLD** to place the Conference on Hold. Press one of the line keys + **CONF** to reinstate the tandem call.

To disconnect a tandem call (using Forced Trunk Disconnect):

1. Press line key for busy line (or use Direct Line Access) + **#** to disconnect the line.

To Barge In on a tandem call:

- Use this procedure to rejoin a Conference already in progress.
1. Press line key for busy line (or use Direct Line Access) + **4** to Barge In.

2

Transfer

Transfer is enabled by default.

To Transfer your call:

1. Do not hang up.
2. Press **TRANSFER**.
3. Dial your co-worker's extension number.
 - You can also Transfer the call to a Ring Group or UCD Group master number.
4. Announce the call + Press **TALK** to make a Screened Transfer.
OR
Press the flashing line key to return to the call if your co-worker doesn't want it.
OR
Press **TALK** to send the call through unscreened.

To Transfer your call to a co-worker's mailbox:

1. Do not hang up.
2. Press **TRANSFER** + Dial your co-worker's extension.
3. Dial **8**.
 - To Transfer the call to your own mailbox, press your own Message Center key.
4. Press **TALK** to hang up.

Feature Operation

Trunk (Line) Queuing and Callback

Trunk (Line) Queuing and Callback are disabled by default.

To queue for a busy line:

1. Press line key for busy line.
OR
Press **TALK** and dial line's Direct Line Access code (e.g., 101 for line 1).
2. Dial **2**; do not hang up.
3. When the line becomes free, you automatically connect.
 - *When you hear dial tone from the line, you can place your call again.*

To leave a Line Callback for a busy line:

1. Press line key for busy line.
OR
Press **TALK** and dial line's Direct Line Access code (e.g., 101 for line 1).
2. Dial **2** + Hang up.
3. When the line becomes free, the system automatically calls you back.
 - *You must answer within 4 rings or the system cancels the Callback.*

Voice Mail

Voice Mail is disabled by default.

The "new mail" icon indicates when you have messages. If you have a Message Center key for your own extension, it will flash when you have new messages.

To call your mailbox:

1. Press **TALK** + Dial ***8**.
OR
Press **TALK** + Press your own Message Center key.
 - *If requested by Voice Mail, enter your security code.*

To leave a message in the mailbox of an unanswered extension:

1. Dial 8.
 - *The Voice Mail system will prompt you to leave a message.*

To activate or cancel Call Forwarding to your mailbox:

1. Press **TALK** and dial ***3**.
2. Dial the Call Forwarding type:
 - 0** = Cancel your extension's Call Forwarding
 - 2** = Call Forwarding Busy/No Answer
 - 4** = Call Forwarding Immediate
 - 6** = Call Forwarding No Answer
3. Dial the Voice Mail master number (e.g., 700).
4. Dial **2** to forward all calls; **8** to forward just outside calls.

To Transfer your call to a co-worker's mailbox:

1. Do not hang up.

2. Press **TRANSFER** + Dial your co-worker's extension.
3. Dial **8**.
 - To Transfer the call to your own mailbox, press ***your own*** Message Center key.
4. Press **TALK** to hang up.

To record your active call in your Mailbox:

Only one party on a call can use Conversation Record at any one time. This includes Intercom calls and Conference calls.

1. While on a call, press your Voice Mail Record key.
 - Your Voice Mail Record key lights while your system calls your mailbox. Once recording begins, the key flashes fast and you hear the voice prompt, "Recording."

To stop Conversation Record:

1. Press your Voice Mail Record key.

To call the Message Center:

- The Message Center key flashes fast when there are new messages in the Message Center Mailbox.
- You can have a Message Center key for your own extension, if desired.

1. Press **TALK** + Press the Message Center key.

To Transfer a call to the Message Center:

1. Press the Message Center key + Press **TALK** to hang up.
 - Your caller will be prompted to leave a message in the Message Center mailbox.

2

Voice Over

Voice Over is disabled by default.

To initiate a Voice Over to a busy extension:

1. Dial 9.
 - You hear two beeps, then you can speak with your co-worker.

A co-worker cannot send a Voice Over to your extension.

Volume Control

Volume Control is enabled by default.

The adjust volume while on a call:

1. Press **RING/VOL**.
 - This adjusts the handset receiver volume, not the volume of your transmitted voice.
 - There are four volume levels: Low, Medium, High, and Maximum.
 - When you hang up, your handset retains the volume level you selected.

Walking Class of Service

Walking Class of Service is disabled by default.

To enable Walking Class of Service at a co-worker's cordless telephone:

1. Press **TALK** + Dial **##0**.
2. Dial your own extension number + **HOLD**.
3. Enter your PIN number + **HOLD**.
4. Place any call or use any feature allowed by your Toll Restriction and Class of Service settings.
 - *You can place additional calls. Walking Class of Service will automatically deactivate after 10 seconds.*

Cordless Telephone Feature Summary

DS1000/2000 Cordless Telephone Feature Summary (Page 1 of 3)			
Feature	Available	Default	Comment
Alphanumeric Display	Yes	Enabled	Handset feature
Auto Redial	No	N/A	
Background Music	No	N/A	
Barge In	Yes	Disabled	
Call Coverage Keys	Yes	Disabled	
Call Forwarding	Yes	Enabled	
Call Forwarding Off Premise	Yes	Disabled	
Call Timer	No	N/A	
Call Waiting/Camp On	Yes	Enabled	
Callback	Yes	Enabled	
Caller ID	Yes	Disabled	Second Call and Third Party Caller ID not available
Caller ID Logging	No	N/A	
Central Office Calls, Answering	Yes	Enabled	
Central Office Calls, Placing	Yes	Enabled	Some codes are disabled by default.
Conference	Yes	Enabled	
Dial Number Preview	No	N/A	
Direct Station Selection	No	N/A	
Direct Station Selection, Console	No	N/A	
Direct Trunk Access	Yes	Operator Only	
Directed Call Pickup	Yes	Enabled	
Directory Dialing	No	N/A	
Distinctive Ringing	Yes	Enabled	Handset feature
Do Not Disturb	No	N/A	
Do Not Disturb Override	Yes	Disabled	
Extension Locking	No	N/A	
Extension Hunting	Yes	Disabled	
Flash	No	N/A	
Forced Trunk Disconnect	Yes	Operator Only	
Group Call Pickup	Yes	Disabled	
Group Listen	No	N/A	
Group Ring	Yes	Disabled	
Handsfree	No	N/A	
Headset Compatibility	Yes	Enabled	Handset feature
Hold, Exclusive	Yes	Enabled	

2

Feature Summary

DS1000/2000 Cordless Telephone Feature Summary (Page 2 of 3)			
Feature	Available	Default	Comment
Hold, Intercom	Yes	Enabled	
Hold, System	Yes	Enabled	
Hotline	Yes	Disabled	
Interactive Soft Keys	No	N/A	
Last Number Redial	Yes	Enabled	Handset feature. Enhanced Last Number Redial not available.
Meet Me Conference	Yes	Enabled	
Message Waiting	Yes	Enabled	Scrolling through waiting messages not available.
Microphone Mute	Yes	Enabled	
Monitor/ Silent Monitor	Yes	Disabled	
Night Service/Night Ring	Yes	Disabled	
Off-Hook Signaling	Yes	Enabled for ICM	Camp-On only. Off-hook ringing not available.
Paging	Yes	Enabled	
Park	Yes	Enabled	
Prime Line Preference	Yes	Intercom Prime Line	
Privacy Release Groups	Yes	Disabled	
Programmable Function Keys	Yes	Line Keys 1-4	
Removing Lines and Extensions from Service	Yes	Operator only	
Reverse Voice Over	Yes	Disabled	
Ringing Line Preference	Yes	Enabled	
Save Number Dialed	Yes	Disabled	
Selectable Display Messaging	No	N/A	
Speed Dial, Extension	Yes	Enabled - No numbers stored	Numbers must be stored via system programming
Speed Dial, System	Yes	Enabled --No numbers stored	Numbers must be stored via system programming or another non-cordless user
Split	Yes	Disabled	
Tandem Trunking	Yes	Disabled	
Time and Date	No	N/A	
Transfer	Yes	Enabled	
Trunk (Line) Queuing	Yes	Operator only	
User Programmable Features	No	N/A	
Voice Mail	Yes	Disabled	Handset has an icon for new messages. Answering Machine Emulation and Message Check are not available.

DS1000/2000 Cordless Telephone Feature Summary (Page 3 of 3)			
Feature	Available	Default	Comment
Voice Over	Yes	Disabled	Handset cannot receive a Voice Over.
Volume and Contrast Control	Yes	Enabled	Volume control is a handset feature. Contrast Control is not available.
Walking Class of Service	Yes	Disabled	
Programming the System	No	N/A	Handset cannot enter programming mode

Feature Summary



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Other Important Telephone Numbers

Sales:	203-926-5450
Customer Service:	203-926-5444
Customer Service FAX:	203-926-5454
Technical Service:	203-925-8801
Discontinued Product Service:	900-990-2541
Technical Training:	203-926-5430
Emergency Technical Service (After Hours)	203-929-7920

(Excludes discontinued products)

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80683INS01

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